Claims

The embodiments of the invention in which an exclusive property or privilege is claimed are defined as follows:

1. A fan shroud aspirator for use with a pre-cleaner having an aspirator port, the fan shroud being disposed between a fan and a cooling module, comprising:

a passage in a surface of the fan shroud, the passage communicating between a portal and an aperture provided in the fan shroud proximal to the fan, the pre-cleaner being mounted to the fan shroud such that the aspirator port is in direct communication with the passage via the portal;

whereby a vacuum necessary for proper aspiration of the pre-cleaner is provided by an air flow induced by the fan through the passage.

2. A fan shroud aspirator as described in claim 1 wherein the fan shroud is comprised of an first section and a second section.

3. A fan shroud aspirator as described in claim 2 wherein the first and second sections each have mating flanges whereby the first and second sections are united to form a complete fan shroud.

4. A fan shroud aspirator as described in claim 3 wherein the first section has an air duct molded therein.

5. A fan shroud aspirator as described in claim 4 wherein the air duct comprises a first channel molded in the first section and a second channel molded in a duct cover.

6. A fan shroud aspirator as described in claim 5 wherein each channel has a cross-section such that when the duct cover is mated to the first section of the shroud a passage is formed therebetween.

7. A fan shroud aspirator as described in claim 6 wherein the duct cover has flanges on either side of the channel that correspond to mating surfaces on the first section of the shroud so that the duct cover can be mateably affixed to the first section of the shroud.

8. A fan shroud aspirator as described in claim 7 wherein the circular passage formed between the duct cover and the first section of the fan shroud is the passage that communicates between the portal and the aperture in the fan shroud.

9. A fan shroud aspirator as described in claim 8 wherein the duct cover includes a nozzle that forms the portal to the passage when the duct cover is mounted to the first section of the shroud.

10. A fan shroud aspirator as described in claim 9 wherein the first section of the shroud includes a plurality of mounting bosses for mounting the pre-cleaner to the fan shroud so that when the pre-cleaner is mounted to the mounting bosses the aspirator port of the pre-cleaner is disposed for communication with the portal formed by the nozzle of the duct cover.

11. A fan shroud aspirator as described in claim 10 wherein the fan shroud is molded from a thermoplastic or thermoset material.